

Article

Personality Traits and Motivation as Factors Associated with Symptoms of Problematic Binge-Watching

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Abstract: Advance in new technologies has created a new form of consuming television. Binge-watching can be highly entertaining behavior, but its excessive forms could lead to development of risk of addiction. The aim of the study was to identify psychological factors associated with symptoms of problematic binge-watching and to establish on what devices and platforms young people tend to binge-watch. The results of the study indicate that Polish university students usually binge-watch on laptops and smartphones by using the Internet—streaming platforms or other websites. Low Conscientiousness was the strongest variable related to symptoms of binge-watching from all the personality traits. Furthermore, results show that there is a significant relationship between low Agreeableness, low Emotional Stability, low Intellect and problematic binge-watching. Moreover, escape motivation was the strongest factor from all motivational variables.

Keywords: binge-watching; behavioral addictions; personality traits; motivation; new technologies

1. Introduction

The development of multiple streaming platforms such as Netflix, Hulu, Amazon Prime, YouTube, Disney + and HBO GO over the recent years has had a big effect on creating the phenomenon of binge-watching [1]. The most common definition of binge-watching is watching multiple episodes of a TV series in one sitting [2–4]. However, it is important to mention that scientists differ among each other about how this phenomenon should be defined—in terms of the amount of episodes watched in one sitting, the duration of the episodes or content—episodes of one TV series or multiple series watched in one session [5–10]. Some scientists define binge-watching as watching 1–3 episodes in one sitting [5,11], or define it as watching three to four or more thirty-minute-long episodes of a TV series, or watching three or more one-hour-long episodes [4]. However, Netflix [2] and Trouleau [12] imply that this phenomenon consists of watching more than two episodes of a TV show in one sitting. The foregoing highlights some difficulties of the approaches in defining binge-watching. In the following research, binge-watching is defined as watching two or more episodes of a TV show in one sitting. The development of streaming platforms such as Netflix or HBO GO allows the viewers to watch TV shows at their own convenience and without any commercial breaks [13,14]. These factors have altered the patterns of consuming media, and binge-watching has become a popular and common way of spending free time, especially among young adults [15–17]. It should be also emphasized that advances in technology have made it possible to binge-watch on multiple devices—individuals do not have to binge-watch only at home by using their computers or TVs [12,18]. They can also

watch their favorite TV shows on the commute to work on their smartphones or tablets [19–21]. It can be assumed that the accessibility of streaming platform apps and TV shows on the Internet has a significant impact on the frequency and the amount of time spent on binge-watching [13]. Another example of the popularity of binge-watching is the number of subscribers of Netflix, which increased rapidly from 5 million in 2012 to 167 million in 2020 [17,22]. The market research conducted over the recent years shows that binge-watching has become an extremely popular phenomenon among viewers. Studies report that 62% of the American population admit that they binge-watch regularly [23]. According to multiple studies, millennials—people born between 1980 to 2000—are the main subscribers of streaming platforms and they binge-watch more frequently [16,17,24]. Furthermore, studies indicate that binge-watching is a gender-neutral phenomenon [17,25]. It can be assumed that progress in new technology creates a new way of consuming media such as TV shows and alters people's viewing behavior. The enormous popularity of binge-watching and the fact that it has become the most common way of consuming media are the effects of technological advance.

Even though binge-watching is a widely popular phenomenon, there is still a lack of research on its psychological conditions. Research has focused mainly on motivations of binge-watching which is based on the uses and gratification theory [26,27]. It explains that people use media such as newspapers, the Internet and television to satisfy their needs. Research based on this theory shows that people binge-watch because it satisfies their need for entertainment and information, they do it to enhance social relations and to escape from daily life problems, and identify with fictional characters [4,5,10,14,27–30]. Most of the studies emphasize that the most common motivation for binge-watching is entertainment and relaxation [5,10,14]. Furthermore, Panda and Pandey [10] indicate that people tend to binge-watch due to a social motivation. Results show that they binge-watch because they want to be part of the group. On the other hand, these studies also show that people who binge-watch are characterized by escape motivation [10,14,29]. It seems important to mention that scientists imply that people tend to binge-watch more to escape reality, which can lead to a decrease in other, more adaptive ways of coping with negative emotions [10]. Other studies show that some individuals use binge-watching as their strategy to regulate their emotions and to deal with negative affective states [6,7,14].

However, there is still a lack of research in which personality traits are related to binge-watching. Recent studies have focused on searching for the relationship between binge-watching and the most common personality trait theory—Big Five personality traits created by Costa and McCrea [11,31–34]. The results of these studies indicate that individuals with low levels of Conscientiousness and high levels of Neuroticism tend to spend more time on binge-watching. Different studies show that Impulsivity is characteristic of people who excessively binge-watch, which can be related to lack of control and the need for instant gratification [6–8]. Research on other behavioral addictions implies that problematic use of the Internet correlates negatively with such personality traits as Conscientiousness and Agreeableness [35,36]. Moreover, there is a positive relationship between Internet addiction and Neuroticism, Extraversion and Openness to experience. On the other hand, research conducted by Kayış et al. [36] implies that Extraversion and Openness to experience are negatively associated with Internet addiction. It seems important to conduct studies on the relationships between excessive binge-watching and personality traits to establish if the relationships are similar to other behavioral addiction.

The abovementioned facts and some research indicate that binge-watching can be a highly entertaining experience, however, it may also be characterized by symptoms of addiction similar to Internet addiction or addiction to mobile phones or video games [7,8,11,14,32,37–39]. It can be assumed that symptoms similar to those of behavioral addiction will be characteristic for excessive forms of binge-watching. The criteria for behavioral addiction are based on the ICD-10 criteria of substance addictions, which consist of loss of control, changes in tolerance, withdrawal syndrome, neglect of other interests, negative social and health consequences [37,40,41]. The development of new technologies, aside from its multiple advances (such as entertaining, cognitive and social aspects), can also lead to

some psychological problems. Some studies have shown that problematic binge-watching is related to sleeping disorders or sedentary behaviors. It can lead to neglect of duties and loss of control over the time spent watching TV shows [8,24,42–44]. Furthermore, research also indicates the relationship between problematic binge-watching, depression and anxiety [9,13].

Due to the increasing popularity of the phenomenon of binge-watching, the increasing rate of occurrence of this behavior in the group of young adults, multiple similarities between problematic binge-watching and other types of behavioral addiction, and lack of research on the main subject, it seems to be important to conduct studies to gain more knowledge on this phenomenon, especially on the psychological conditions of problematic binge-watching, such as motivation and personality traits. It is also worth mentioning that there is very little research on the subject of binge-watching. Furthermore, gaining more knowledge about binge-watching seems to be worthwhile in terms of the inclusion of behavioral addiction into the ICD-10 [40] and DSM-V [45].

The aim of this study was to search for the psychological factors associated with the symptoms of problematic binge-watching. Psychological conditions in this study are understood as Big Five personality traits and motivations to watch TV series distinguished by Rubin [26,34]. Furthermore, the second goal of the study was to search on which devices an individual is most likely binge-watch TV series.

The following research question were asked:

1. Which devices are more likely to be used by Polish university students to binge-watch TV series?
2. How and to what extent are the Big Five personality traits related to the symptoms of problematic binge-watching in the group of Polish university students?
3. How and to what extent are motivation types for watching TV series related to the symptoms of problematic binge-watching in the group of Polish university students?

Due to the exploratory character of this research, it was decided to not provide specific hypotheses. However, on the basis of the abovementioned studies, it can be assumed that the general hypothesis is: Big Five personality traits and motivations to watch TV are significantly related with the symptoms of problematic binge-watching in the group of Polish university students.

2. Material and Methods

2.1. Sample

The desired sample in this study consists of 1000 participants. Due to the aim of the studies and based on the literature, purposive sampling was used in this study. The main criteria for inclusion were: age between 19–27, being a student, admitting to binge-watching TV series. The study was conducted online from March to September 2018. The data were collected using the forms on Google Platform. The research was anonymous, thus no personal data were collected. The link with the study was shared on the Facebook groups of Polish universities, technical universities, as well as on fan groups which gather people interested in TV shows and pop culture. Participation was voluntary and respondents agreed to participate in the study.

The research group consisted of 1257 people. Due to incomplete questionnaires and not meeting the criteria of inclusion, 253 people were excluded from the study. The results obtained from 1004 subject were included in the further analysis. The research subjects were students at Polish universities, which studied science and the humanities. The sample consisted of 854 (85%) women and 150 men (15%). Their ages ranged from 19 to 26 years old. The average age of the students was 22 years. The distribution of fields of study in the studied group is as follows: social sciences—36%, humanities—30%, exact sciences—29%, medical sciences—5%.

2.2. Methods

The polish adaptation of Goldberg's IPIP-BFM-50 questionnaire by Strus, Ciecuch and Rowiński [46] was used to measure the levels of the personality traits. This method is an alternative method of examining Costa and McCrae's Big Five personality traits. The questionnaire consists of 50 items and the following five factors:

- Extraversion—this scale presents the level of sociability, social confidence, assertiveness, energy and activity of the person.
- Agreeableness—this trait is related to positive or negative attitudes towards other people.
- Conscientiousness—this scale shows the level of diligence, ambitiousness, organization skills and tendency towards perfectionism.
- Emotional Stability—this trait shows the level of emotional reactivity and tolerance to frustration and stress.
- Intellect—this scale presents the level of the person's intellectual openness, creativity, imagination and cognitive needs. Furthermore, it shows a tendency for introspection and non-conformity.

The Cronbach's coefficients for the abovementioned scales ranged from 0.77 to 0.88, which indicates satisfactory reliability of the method. The intercorrelations between the constructs ranged from 0.1 to 0.44 ($p < 0.001$). Participants marked their answers on a 5-point Likert scale, where 1 means very inaccurate, 2—moderately inaccurate, 3—neither accurate nor inaccurate, 4—moderately accurate, 5—very accurate.

The polish adaptation of the Viewing Motivation Scale by Alan M. Rubin was used to measure the level of the motivation for watching TV series [26,47]. The Polish adaptation of the questionnaire consist of 27 items and six scales:

- Entertainment motivation—individuals watch TV series to feel positive emotions and to have fun.
- Motivation to deal with loneliness—individuals watch TV series to avoid feelings of loneliness. TV shows and fictional characters become companions in their moment of solitariness. Because of that they do not have to think about the lack of company of other people.
- Informative motivation—individuals watch TV shows to seek information about themselves and about the world. They watch TV series to satisfy their cognitive needs.
- Motivation of spending free time—individuals watch TV shows because it is their habit. It also can be their way to prevent boredom.
- Social motivation—people watch TV shows because they want to establish or maintain their social connections. This behavior allows them to spend time with their family or friends. It can also be a topic of conversation between people.
- Escape motivation—people watch TV shows because it allows them to escape daily life problems.

The Cronbach's coefficients for the abovementioned scales ranged from 0.69 to 0.88, indicating satisfactory reliability of the tool. The intercorrelations between the constructs ranged between 0.09 to 0.43 ($p < 0.001$). Respondents marked their answers on a 5-point Likert scale, where 1 means—completely untrue, 2—a bit true, 3—very likely, 4—true, 5—definitely true.

Another method used in this study was the Questionnaire of Excessive Binge-Watching created by Starosta, Izydorczyk and Lizińczyk [47]. The questionnaire was used to examine the symptoms of problematic binge-watching, which can be the symptoms of behavioral addiction. It contains 30 items and the following six subscales:

- Emotional reactions—binge-watching is a source of positive emotions for the individual. It can also be a strategy used to cope with negative emotional states. It is also related to emotional discomfort—anger, despondency, anxiousness—at moments of limited access to watching TV shows.

- Lies—the individual hides the truth about the amount of time spent binge-watching to maintain a positive image of themselves in front of others.
- Loss of control and neglect of duties—the individual loses control over the amount of time spent binge-watching and is unable to control their behavior. Because of this, the person can have problems with fulfilling work or school obligations, which can lead to negative consequences.
- Negative health consequences—the scale relates to problems with sleeping and with having a regular and healthy diet, which are the result of excessive binge-watching.
- Preoccupation—this scale presents the level of cognitive and emotional fascination with binge-watching and TV shows. It is also related to the frequency of searching for information on these topics.
- Negative social consequences—individuals lose their connection to other people, especially their families, partners and friends, because of excessive binge-watching.

Cronbach's α coefficients for the whole method and separate subscales of the questionnaire ranged from 0.67 to 0.89 which indicates the satisfactory psychometric characteristic of the tool. The intercorrelations between the constructs ranged between 0.26 and 0.61 ($p < 0.001$). Participants in the study marked their answers on the 6-point Likert scale: 1—never, 2—sporadically, 3—rarely, 4—sometimes, 5—often, 6—always.

The Questionnaire of Excessive Binge-Watching can also be used to measure the level of intensity of problematic binge-watching among Polish students. The total score of this method determines if the risk of symptoms of excessive binge-watching occurring is low (0–60 pt), medium (61–120 pt) or high (121–180 pt).

Binge-watching is defined as watching two or more episodes of a TV series in one sitting. Frequency of the binge-watching sessions (once a month, twice a month, once a week, several times a week, everyday), the average amount of episodes watched in one sitting (measured in ranges basing on Trouleau [10]: 1–2 episodes, 3 episodes, 2–5 episodes, 2–14 episodes), devices and platforms used to binge-watch (laptop, desktop computer, smartphone, TV, tablet) were measured by the survey. This method also consists of some sociodemographic variables regarding gender, age and studies of the participants in the research.

2.3. Statistical Methods

The analyses of the results were conducted by using IBM SPSS Statistic software—Statistical Package for the Social Sciences. The first step of the analysis was measuring the correlations between the symptoms of problematic binge-watching and psychological variables such as personality traits and motivation. Due to the risk of committing type I error, the Bonferroni correction was used. Afterwards, a stepwise regression analysis was performed. The aim of the analysis was to estimate the strength and direction of psychological factors associated with the symptoms of problematic binge-watching. Due to the large number of independent variables, stepwise regression was applied. It allows to subsequently include the relevant variables into the model. The process lasted until the appearance of the first factor whose level of significance exceeded the permissible values of $p < 0.05$. Because of this, the models did not contain unnecessary and weak factors. The obtained models have satisfactory prediction.

3. Results

The results show that the majority of the participants of the study binge-watch by using a laptop (93%). It is also important to emphasize that 77% of individuals also use their smartphone to watch their favorite series. Only 25% of the studied group also have a tendency to watch TV series on their desktop computer. Another 25% of the subjects binge-watch by using a TV. On the other hand, 21% of the participants use tablets. Furthermore, 89% of the participants admit that they use the Internet to find TV shows to binge-watch. However, 39% of the research group use streaming apps such as Netflix, HBO GO, Amazon, etc. It is important to mention that 21% of the individuals admit that they

use illegal sources in order to binge-watch series. Only 19% of the group tend to watch TV series in the form of marathons on television. On the other hand, 6% of the group buy DVDs or Blu-rays to binge-watch their favorite series. Furthermore, the results of the studies show that 37% of the participants binge-watch only once a month, 24% tend to do this twice a month. Moreover, 19% of the Polish students binge-watch once a week, 17% do it several times a week and only 3% do it every day. On the other hand, most of the participants in the study admit that they watch only 1–2 episodes in one sitting (42%). However, 16% of the research subjects tend to watch 3 episodes in one session, 33% of binge-watchers watch 2–5 episodes in one session and only 8% usually watch 2–14 episodes of a TV series. The majority of the results (70%) were characterized by a medium intensity of the risk of development of excessive binge-watching. The lowest risk applies to 22% of the research subjects. Only 8% of the examined population was characterized by the highest risk of developing problematic binge-watching.

The results presented in the Table 1 show that the correlations between the variables are not strong, most of them are statistically significant. It seems important to emphasize that the correlations between the symptoms of problematic binge-watching and types of motivation for watching TV series are higher than the correlations between the dependent variable and personality traits. Furthermore, most of the correlations between symptoms of problematic binge-watching and types of motivation are positive. On the other hand, negative correlations are present between symptoms of problematic binge-watching and personality traits. The strongest positive correlations occur between Emotional reactions, Motivation to deal with loneliness and Escape motivation. Preoccupation correlates moderately with Entertainment motivation, Informative motivation, Motivation for spending free time and Escape motivation. Furthermore, Loss of control and neglect of duties correlates positively with Escape motivation. Moreover, Emotional Stability correlates negatively with Emotional reactions and Escape motivation. Conscientiousness also correlates negatively with Loss of control and Neglect of duties.

Table 1. Coefficients of Spearman's correlation between the variables.

	ER	L	LCND	NHC	P	NSC
EM	0.36 *	−0.01	0.15 *	0.18 *	0.47 *	0.15 *
MDL	0.47 *	0.24 *	0.27 *	0.21 *	0.23 *	0.24 *
IM	0.40 *	0.20 *	0.15 *	0.18 *	0.47 *	0.26 *
MSFT	0.39 *	0.10 *	0.22 *	0.19 *	0.35 *	0.25 *
SM	−0.001	0.08 *	−0.01	0.04	0.13 *	0.01
ESM	0.62 *	0.20 *	0.37 *	0.26 *	0.34 *	0.34 *
E	−0.21 *	0.01	−0.05	−0.03	−0.12 *	−0.27 *
A	−0.16 *	−0.07 *	−0.08 *	−0.10 *	−0.10 *	−0.28 *
C	−0.16 *	−0.13 *	−0.38 *	−0.33 *	−0.15 *	−0.16 *
ES	−0.31 *	−0.09 *	−0.21 *	−0.15 *	−0.16 *	0.27 *
I	−0.12 *	−0.08 *	−0.10 *	−0.02	−0.07 *	0.28 *

Notes: EM—Entertainment motivation, MDL—Motivation to deal with loneliness, IM—Informative motivation, MSFT—Motivation of spending free time, SM—Social motivation, ESM—Escape motivation, ER—Emotional reactions, L—Lies, LCND—Loss of control and neglect of duties, NHC—Negative health consequences, P—Preoccupation, NSC—Negative social consequences, E—Extraversion, A—Agreeableness, C—Conscientiousness, ES—Emotional Stability, I—Intellect; * significant correlations.

Subsequently, the stepwise regression analyses were performed to obtain the factors associated with the symptoms of problematic binge-watching. The results of the analyses are presented in Table 2.

Table 2. Stepwise regression model explaining the independent variables.

Dependent Variable	Independent Variable
Emotional reactions	Adjusted $R^2 = 0.493$, $F(9.994) = 110$, 1 ; $p < 0.001$
	Factors:
	Entertainment motivation $\beta = 0.089$ ***
	Motivation to deal with loneliness $\beta = 0.192$ ***
	Informative motivation $\beta = 0.237$ ***
	Social motivation $\beta = -0.080$ ***
	Escape motivation $\beta = 0.343$ ***
	Agreeableness $\beta = -0.082$ ***
	Emotional stability $\beta = -0.093$ ***
Lies	Intellect $\beta = -0.084$ ***
	Adjusted $R^2 = 0.125$, $F(9.994) = 17.08$, $p < 0.001$
	Factors:
	Entertainment motivation $\beta = -0.144$ ***
	Motivation to deal with loneliness $\beta = 0.125$ ***
	Informative motivation $\beta = 0.197$ ***
	Escape motivation $\beta = 0.150$ ***
	Extraversion $\beta = 0.111$ ***
	Agreeableness $\beta = -0.073$ *
Loss of control and neglect of Duties	Conscientiousness $\beta = -0.096$ **
	Intellect $\beta = -0.076$ **
	Adjusted $R^2 = 0.270$, $F(9.994) = 42.89$, $p < 0.001$
	Factors:
	Escape motivation $\beta = 0.279$ ***
	Extraversion $\beta = 0.093$ **
Negative health consequences	Conscientiousness $\beta = -0.317$ ***
	Emotional stability $\beta = -0.076$ **
	Intellect $\beta = -0.078$ **
	Adjusted $R^2 = 0.175$, $F(8.995) = 27.88$, $p < 0.001$
	Factors:
	Motivation to deal with loneliness $\beta = 0.079$ *
	Informative motivation $\beta = 0.126$ ***
Preoccupation	Escape motivation $\beta = 0.112$ **
	Extraversion $\beta = 0.077$ *
	Agreeableness $\beta = -0.068$ *
	Conscientiousness $\beta = -0.268$ ***
	Adjusted $R^2 = 0.360$, $F(8.995) = 70.66$, $p < 0.001$
	Factors:
	Entertainment motivation $\beta = 0.260$ *
	Informative motivation $\beta = 0.327$ *
Negative social consequences	Motivation to spend free time $\beta = 0.101$ *
	Agreeableness $\beta = -0.07$ *
	Emotional stability $\beta = -0.068$ *
	Intellect $\beta = -0.063$ *
	Adjusted $R^2 = 0.360$, $F(10.994) = 31.85$, $p < 0.001$
	Factors:
	Informative motivation $\beta = 0.214$ ***
	Escape motivation $\beta = 0.161$ ***
	Extraversion $\beta = -0.115$ ***
	Agreeableness $\beta = -0.185$

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The obtained results indicate that the strongest relationship occurred between Emotional reactions and Escape motivation. The higher the Escape motivation, the higher the Emotional reactions of individual who binge-watch. Informative motivation, Motivation to deal with loneliness and Entertainment motivation also have a positive impact on the dependent variable. On the other hand, Emotional stability, Intellect, Agreeableness and Social motivation are also significantly associated with Emotional stability. The abovementioned variables have a negative impact on the dependent variable. It means that the higher the Emotional reactions score, the lower the levels of these independent variables. These factors explain the variable of Emotional reactions being at 50%.

Subsequently, Informative motivation and Escape motivation are positively associated with the variable Lies. Other significant factors are Motivation to deal with loneliness and Entertainment motivation. However, the strongest factors associated with this variable among the personality traits are Conscientiousness, Intellect and Agreeableness. The character of the impact of these three factors is negative. On the other hand, Extraversion has a positive impact on this dependent variable, which means that the higher the levels of Extraversion, the more an individual lies about their binge-watching behavior.

On the other hand, a low level of Conscientiousness and a high level of Escape motivation are the strongest factors for Loss of control and neglect of duties. It is important to mention that the majority of the factors related to this variable are personality traits. Emotional Stability and Intellect have a negative impact on the dependent variable. Only Extraversion has a positive impact on Loss of control and neglect of duties. The model explains 27% of the dependent variable.

The results of the statistical analysis show that the strongest relation is between Conscientiousness and Negative health consequences. The effect of the factor is negative, which means that experiencing negative health consequences from problematic binge-watching is more characteristic of the less conscious people. Other weaker but also significant psychological factors were Informative motivation, Escape motivation, Motivation to deal with loneliness, all of which have a positive effect on the dependent variable. However, personality traits such as Agreeableness and Extraversion have a weaker and negative impact on Negative health consequences.

The results show that three personality traits—Agreeableness, Emotional Stability and Intellect, proved to be the significantly associated with Preoccupation. Statistical analysis shows that these personality traits have a negative effect on these symptoms of problematic binge-watching. This means that people with low levels of these personality traits are more emotionally and cognitively engaged in binge-watching behaviors. Furthermore, the motivational factors for this dependent variable were Entertainment motivation, Informative motivation and Motivation to spend free time. All have a positive effect on the variable. This model explains 36% of the dependent variable.

Furthermore, only four variables are significantly associated with Negative social consequences. The personality traits related to symptoms of problematic binge-watching were Agreeableness and Extraversion. The impact of these variables is negative. However, Informative motivation and Escape motivation are significant motivational factors. This model also explains 36% of the dependent variable.

To sum up, Conscientiousness is the strongest factor among all personality traits. It is especially visible in predicting such variables as Loss of control and neglect of duties and Negative health consequences. However, Escape motivation is the strongest factor among motivational variables. It is a predictor of five symptoms of problematic binge-watching. It seems to be worth emphasizing that the motivational variables proved to have a higher predictive value than the personality traits. Furthermore, the impact of the motivational variables was always positive, which means that the higher the motivation to watch series, the higher the symptoms of problematic binge-watching. On the other hand, personality traits almost always have a negative impact on the dependent variable. The only exception of this was Extraversion.

4. General Discussion

The results show that young adults most often binge-watch TV series on their laptops or mobile phones. Furthermore, most of them use the Internet—streaming platforms and other websites, to do it. Surveys confirm that computers and mobile phones are the most common choice of device for binge-watching [12,17]. It can be assumed that the advances of new technologies have made binge-watching on these kind of device more accessible than the old format of consuming shows on the television. Individuals decide where they binge-watch and how many episodes they view. Moreover, this kind of device can create the possibility to binge-watch TV series at work and at school. Studies show that 67% of viewers choose to binge-watch in public [19]. It can be assumed that the accessibility of binge-watching can contribute to the increasing scale of the phenomenon and consuming an excessive number of episodes.

The result of the regression shows that there is a stronger relation between the motivational variables and the symptoms of problematic binge-watching than between the personality traits and the symptoms of problematic binge-watching. However, low Conscientiousness was the strongest factor of all Big Five personality traits. It can be assumed that the person who excessively binge-watches can lose control of the amount of time spent watching TV series, which can lead to neglecting chores, school or work, and worse academic results. Furthermore, it can lead to poorer quality of sleep and insomnia [43,48]. Similar results about the relationship between binge-watching and Conscientiousness are presented in the studies conducted by Govaert [11], Chamblis [31] and Tóth-Király et al. [32]. The results of the research show that there is a weaker but also a significant relationship between the symptoms of problematic binge-watching and low Emotional Stability. Neuroticism is related to impulsivity, a tendency to feel negative emotions, low adaptation to frustration and stressful situations [49]. Such results seem to comply with research which implies that problematic binge-watching can be related to the regulation of negative emotions, impulsivity, loss of control and regret [7,8,38,50]. Furthermore, Tóth-Király et al. [32] and Pittman and Steiner [33] imply that neuroticism is related to binge-watching and it is also a significant predictor of Internet addiction [36,51,52]. Another significant factor for all symptoms of problematic binge-watching, apart from Loss of control and neglect of duties, was low Agreeableness. On the basis of the criteria of Internet addiction created by Woronowicz [41] on the grounds of ICD-10 [40], it can be assumed that people who excessively binge-watch may be resistant and continue their behavior despite negative social and health consequences; they can also lie about the amount of time spent watching TV series, which could lead to misunderstandings and difficulties in their social life. The results also indicate that low Intellect is positively related with most of the symptoms of problematic binge-watching, which complies with results regarding other behavioral addictions [36,53]. Intellect is related to Openness to experience, with a tendency for introspection and cognitive needs. Low levels of this personality trait are also characteristic of social media addiction and mobile phone addiction. It can be assumed that people who binge-watch problematically may not be curious about other forms of activity [10]. Such a situation could be explained by the loss of other forms of pleasure or the fact that the virtual reality can satisfy their needs for stimulation and information [10,36,40]. On the other hand, the results of the study show that Extraversion has a negative relationship with Negative social consequences and a positive effect on the variable Lies. Extraversion is related to sociability; however, studies show that most people tend to binge-watch in solitude and that excessive binge-watching can be related to spending more time on watching TV series than with family or friends [15,54]. Binge-watching in solitude and lack of the communication with others could lead to a feeling of loneliness and abandonment. One can assume that these negative emotions could lead to further isolation and create a vicious circle, which is also characteristic of other forms of addiction to new technologies [36,55–57].

Escape motivation was the strongest factor for most of the symptoms of excessive binge-watching. Many studies on behavioral addiction showed that the Internet, video games, social media and shopping can be a way to avoid daily life problems [4,7,10,58–61]. The results of the research show that excessive binge-watchers have a tendency to use these behaviors as a strategy to regulate their

emotions [7]. Moreover, Panda and Pandey [10] imply that the reasons for more frequent engagement in binge-watching to escape reality could lead to the decreased use of other, more adaptive ways of coping with negative emotions. Furthermore, Govaert [11] indicates that binge-watchers tend to cope with stress using avoidance and emotional coping, instead of task-oriented coping mechanisms. Due to the similarity between other behavioral addictions and the results of this research, it can be assumed that problematic binge-watchers binge-watch as a coping mechanism. Individuals may escape into a fictional world to avoid negative emotions and problems. Conlin [3] showed in her study that binge-watching can be very immersive behavior, which is related to high cognitive and emotional engagement with fictional history. The immersive character of this behavior and the accessibility of streaming platforms may facilitate a viewer's escapism. The statistical analysis shows that Informative motivation is associated with almost all symptoms of problematic binge-watching except Loss of the control and neglect of duties. It can be assumed that a person may want to access all the information presented in the TV series, thus the individual starts to become emotionally and cognitively engaged in this behavior. Shim and Kim [50] emphasize that the need for cognition can motivate a person to binge-watch more and may also increase other binge-watching motivations. It is important to mention that compulsive information seeking is also a part of Internet addiction [37]. One can assume, that viewers may seek knowledge about the world, relations or the solutions of problems in TV series. It seems to be important to establish what kind of information the viewers are searching for while they are binge-watching. Furthermore, in relation to cognitive needs, it would also be important to examine the relationship between binge-watching and cognition, for example how binge-watchers, problematic binge-watchers and non-binge-watchers differ from each other in terms of preserving and recalling the information from watched TV series. Another motivation significant for symptoms of problematic binge-watching was Motivation to deal with loneliness, which was significantly related with Emotional reactions, Lies and Negative health consequences. Studies conducted by Wheeler [9] show that people who are depressed or feel lonely have a stronger tendency towards problematic binge-watching. They also create parasocial relationships with fictional characters. The emotional engagement in these relationships was similar to real relationships. This fictional character may become a companion in their loneliness [47]. On the other hand, Entertainment motivation was related to Emotional reactions, Lies and Preoccupation. Binge-watching is a highly entertaining behavior, which provides positive emotions and fun [3–7,10,27,29,30,33]. It is also emotionally and cognitively engaging. People watch TV shows to fulfil their hedonistic needs and to feel positive emotions. Furthermore, Motivation to spend free time was also a significant factor for Preoccupation. It means that binge-watching is a way to avoid boredom, to spend free time alone or with friends and feel emotionally and cognitively engaged in the narrative. Some research indicates that binge-watching can be a habit, something that people just do to avoid boredom [10].

It also seems important to mention that the global pandemic of COVID-19 can lead to more frequent binge-watching behaviors. People have to stay at home and practice social distancing, so to fulfil their needs and to cope with boredom or anxiety, they can look for an entertaining way to spend their time. As Conlin said [3], binge-watching is highly immersive and engaging behavior, which seems to be also a method to regulate emotions [6,7]. It seems to be important to study in particular the motivations to binge-watch in pandemic times. People may binge-watch for entertainment purposes and to cope with boredom. However, they can also binge-watch TV series to escape the anxiety triggered by worries about the difficulties related to a disease pandemic. They can also do it to prevent loneliness in times of isolation. On the other hand, binge-watching can be also a way to spend some time with friends during online live chats or by using plugins such as "Netflix party". These results have been confirmed in a study conducted by Dixit et al. [62]. They also emphasize that 28% of the studied population had lost control over their binge-watching behaviors even though they have tried to control them. They also fear how binge-watching can affect their future work. Due to engaging in fewer activities, it could be easier to lose control over the amount of binge-watched episodes or to spend an entire day on binge-watching another TV show. People can become accustomed to gaining

instant gratification in the form of watching another episodes of a TV series in a lockdown period, which could contribute to the occurrence of some forms of behavioral addiction and withdrawal symptoms after the lockdown [63]. Due to the abovementioned facts, it is important to study the subject of binge-watching during and after the COVID-19 pandemic to examine the development of the phenomenon in its positive and negative forms.

5. Limitations of the Study

The first limitation of the study is the homogeneous character of the group, which was an effect of purposive sampling. The research was conducted on a group which consisted of only young people aged between 19 to 26. Due to the lack of results obtained from people in their adolescence, adulthood and older age, it is hard to generalize the obtained predictors for people of different ages. The second limitation of the study was related to the unequal numbers of women ($n = 854$) and men ($n = 150$). The differences in quantity between the two genders were so large that it could have affected the results of the research. Such large preponderance of women could be the result of the following reasons. First, women are more likely to participate and complete online studies than men [64]. Moreover, it seems to be important to emphasize that the link with the study was uploaded on Facebook. Research shows that women tend to use social media platforms more frequently than men [65]. Second, watching TV series could be more popular among the group of Polish women than in the group of young Polish men, who could prefer other ways of spending free time. Some studies indicate that binge-watching is gender neutral phenomenon [17,25]. However, systematic reviews concerning the phenomenon of binge-watching show that women were the majority of the participants in most of these studies [14,66]. It can be assumed that binge-watching as a topic of research may be more interesting for women. Third, the survey was posted on a group for the humanities and social studies, where women are the majority of students. Furthermore, women are the majority of the student body at Polish universities [67]. Undoubtedly, there is a need to conduct research on more diversified groups in terms of age and gender.

6. Conclusions

To summarize, young Polish students tend to use a laptop or a mobile phone to binge-watch TV series, which makes it accessible at any time and place. Motivational factors of symptoms of problematic binge-watching are stronger than the Big Five personality traits. The character of the relationship between the symptoms of problematic binge-watching and motivational variables is positive. Personality traits have the opposite effect. The strongest factor associated with the symptoms of problematic binge-watching is Escape motivation. It can be assumed that people who excessively binge-watch do it to avoid daily life problems. Individuals can use it as a strategy to cope with negative emotions. On the other hand, low Conscientiousness was the strongest factor out of all the personality traits. It can be assumed that people with low Conscientiousness are characterized by higher levels of symptoms of problematic binge-watching. They may lose control over the time spent on binge-watching, neglect school, work and duties and have to deal with negative health and social consequences of excessive binge-watching. Low Agreeableness, low Emotional Stability and low Intellect are weaker but also significant factors related to the symptoms of problematic binge-watching.

Technological advances create new ways of entertainment but also new types of danger in the shape of new types of behavioral addictions. There is a thin line between highly entertaining binge-watching and problematic binge-watching which is characterized by symptoms of addiction. This could also affect not only the life and well-being of the individual, but also their social environment. The understanding of predictors of symptoms of problematic binge-watching is important in terms of prevention and therapeutic care, especially among young people—children, adolescents and young adults, who are used to operating in the world of new technologies that can be useful as well as dangerous for their mental health. The excessive binge-watching can contribute to worse academic or school achievements, can be a distraction from work or duties and can have an effect on the social

relations of the person. Because of that, it could be important to create prevention programs for young people to educate them about the risk factors and consequences of excessive binge-watching. Undoubtedly, there is a need for further research on the psychological conditions of binge-watching for a better understanding of this highly popular phenomenon.

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